

PLOTNIKOVA, L. F.

Stratigraphy of Upper Cretaceous sediments in the Konkovo-
Yalynskaya trough, Trudy Inst. geol. nauk. AN URSR. Ser. zah.
geol. no.1:3-11 '62. (MIRA 16:1)

(Dnieper Valley—Geology, Stratigraphic)

PLOTNIKOVA, L.F.

Turonian and Coniacian deposits of the Konka-Yalin Lowland.
Dop. AN URSR no. 6:793-795 '61. (MIRA 14:6)

I. Institut geologicheskikh nauk AN USSR. Predstavлено
akademikom AN USSR V. G. Bondarchukom [Bondarchuk, V.H.].
(Zaporozh'ye Province--Geology, Stratigraphic)

L 12294-63EPF(c)/EWT(m)/BDS AFFTC/APGC Pr-4 BW/MN
S/081/63/000/005/051/075 67 64AUTHOR: Masagutov, R. M., Berg, G. A., Volkova, L. I., Plotnikova, L. I.,
Pechnikova, T. N. Zagryadskaya, L. M. and Mironov, A. A.TITLE: Combinations of preparation of raw material for catalytic cracking
(cracking and distilling of neutralized contact catalyst)

DESCRIPTION: In the present paper the results of experiments on the effect of activity of the catalyst on the yield of cracked vapors are presented.

Experiments were conducted on cracking of purified (so-called "depleted") gas oils from a plant for producing neutralized contact catalyst (NChK) and extracted vacuum gas oil from a mixture of Shkapov and Romashkin petroleum. In the catalytic cracking of acid purified gas oil the extraction of coke is lower than in cracking of unrefined gas oils. Gas which forms in cracking of refined gas oil contains more propane-propylene and butane-butylene fractions and less

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Combinations of preparation

3

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H₂S. Gasoline, extracted in cracking of refined gas oil, contains a smaller amount of S compounds and is more stable during storage. As a result of cracking of refined gas oil a 30 - 40 % fraction of diesel fuel with content of S $\leq 1\%$ is extracted. The process is economical, which is indicated by calculations conducted by one of the Ufim oil refineries. A. Nagatkina.

[Abstractor's note: Complete translation]

L-2911-66 - MWT(1)/PDD
ATTACHMENT ONE - APPENDIX

REFERENCES AND NOTES

三

ASSOCIATION: Odessky polyteknicheskiy institut (Odessa Polytechnical Institute)
Card No: 14

434, 53

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CIA-RDP86-00513R001341320012-4

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L 12294-63EPF(c)/EW/T(m)/BDS AFFTC/AFGC Fr-4 EW/MN
S/081/63/000/005/051/07567
64

AUTHOR: Masagutov, R. M., Berg, G. A., Volkova, L. I., Plotnikova, L. I.,
Pechnikova, T. N., Zagryadskaya, L. M. and Mironov, A. A.

TITLE: Combinations of preparation of raw material for catalytic cracking and obtaining of neutralized contact catalyst

PERIODICAL: Referativnyy zhurnal. Khimika, no. 5, 1963, 499, abstract 591b (Tr. Nauchn. Truda po neftrobochnoi nafti, 1962, no. 5, 80 - 91)

TEXT: At an experimental plant in a vapour reactor in a molten layer of bottom aluminosilicate catalyst (ET) at 450° C volume speeds of 0.7, 1.0 and 1.5 hours⁻¹, extraction ratio (ER) of (index of activity of ET 32 ± 34 points) experiments were conducted on combining of purified (separated "impurities") gas from a plant for producing neutralized contact catalyst (neutralized catalyst) and purified gas from a distillation column (bottom product). The results of these experiments showed that the yield of purified catalyst was 90% and the yield of purified gas was 95%. The yield of purified catalyst was 90% and the yield of purified gas was 95%.

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L 12294-63

Combinations of preparation

3

S/081/63/000/005/051/075

H₂S. Gasoline, extracted in cracking of refined gas oil, contains a smaller amount of S compounds and is more stable during storage. As a result of cracking of refined gas oil a 30 - 40 % fraction of diesel fuel with content of S < 1 % is extracted. The process is economical, which is indicated by calculations conducted by one of the Ufim oil refineriss. A. Nagatkina.

[Abstractor's note: Complete translation]

Card 2/2

and the other two were
entombed with him.

SOURCE: Trudy 11 Vsesoyuznogo soveshchaniya po radiotekhnicheskoy radiostan-
ci. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962,
497-500

TEXT: The work was carried out with a view to forming and grafting polymer chains to the surface of mineral powders for use in e.g. filters. The experiments were carried out with ZnO, MgO and BeO powders exposed to the vapor of methylmethacrylate at a temperature of 100°C, in thin-walled glass ampoules whilst the entire apparatus was rotated by an electric motor. The radiation source was a 700 kv electron accelerator. There was no evidence for the formation of grafted polymers in the control, nonirradiated experiment, but with a radiation intensity of 1.2×10^{18} ev/cm³.sec and an exposure time

Card 1/2

Radiation grafting of ...

S/844/62/000/000/084/129
D423/D307

of 75 mins, 51.3% by weight on MgO of total polymer was formed, with 20.7% as grafted polymer. Results for BeO with 6×10^{18} ev/cm³. sec and only 5 min irradiation time yielded 24% of the grafted polymer. The relationship between total quantity of polymer formed and intensity of radiation was shown to correspond to a bimolecular mechanism for rupture of kinetic chains due to recombination of the growing macroradicals, and confirmed the radical mechanism of the polymerization process. Experiments carried out with ZnO did not lead to positive results. This is explained on the basis of the property of electron conduction, so that the electrons can not be transferred to the acceptor as the catalyst and the radicals are not formed.

PLOTNIKOVA, L.M.; YESINA, A.I.

Spatial distribution of seismic centers in Central Asia during
1957-1959. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk 6 no.3:18-24
'62. (MIRA 15:8)

1. Institut matematiki imeni V.I.Romanovskogo AN UzSSR.
(Asia, Central—Earthquakes)

AUTHOR: Chubakova, L. G., author, etc.

TITLE: Spatial distribution of earthquake centers in Soviet Central Asia between 1957 and 1959

PERIODICAL: Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 3, 1962, 18 - 24

TEXT: Data were collected at 24 fixed stations including 14 general equipped with apparatus on the D. P. Kirnos system, 6 regional with apparatus on the D. A. Kharin system, three with different apparatus and 1 with teleseismic apparatus on the B. B. Golitsyn system; also mobile stations belonging to the Garm group in the comprehensive seismological expedition of the Institut fiziki Zemli AN SSSR (Institute of Physics of the Earth AS USSR) and to the Dushanbe and Vakhsh groups of the Institut seismologii i seismicheskogo stroitel'stva Tadzhikskoy Akademii Nauk (Institute of Seismology and Seismologic Structure of the Academy of Sciences Tadzhikskaya SSR). In 1958/59, 8 mobile stations of the AN SSSR (AS USSR), AN KirgSSR (AS KirgSSR), AN UzSSR (AS UzSSR) were operating in

Card 1/3

S/166/62/000/003/002/010

B142/B101

Spatial distribution of earthquake...

the Fergana valley. The epicenters were calculated at the expedition stations and those which had an error of $\delta \leq 5$ km were not checked against the data of the fixed stations. For quakes in the crust the epicenters were determined by the 'intersection and hyperbola' methods; for quakes located more deeply they were determined by Isikava's method. The centers were classified according to the quantity M (B.: Gutenberg, C.R. Richter,.., Earthquake magnitude, intensity, energy and acceleration, Bull. seism., No. 4, No. 3, 1942). Deeply situated quakes which are recorded at a distance ≥ 1000 km from the epicenter, are called intensive. The quakes registered are between $M = 3$ and $M < 6$ 1/4. The centers of all strong quakes were to zones of high mountain density or on their boundaries. The average activity between 1917 and 1949 was similar to that between 1911 and 1940. The strongest seismic activity occurred in the Pamir-Alai-Karakorum region, in North Tian Shan, in the Altai, in the Khibet plateau, along the Alay and Kokshaitau ranges, Verakay-Alatau, Sogdian, Chatkal'skiy, Talasskiy, and Chu-Iliyskiy ranges, and in the eastern Fergana valley. The Naryn depression, the north-western part of the Fergana valley, parts between the Kirgizskiy and Talasskiy ranges and the Madatau chain, the Issyk-Kul'-depression, a region between 70.5 and

Card 2/3

GINZBURG, Ye.A., kand.med.nauk; PLOTNIKOVA, L.M.; POLETILO, Ye.V.

Postvaccinal reactions following intracutaneous revaccination of
inhabitants in a rural location. Probl. tub. 41 no.11:11-14 '63.
(MIRA 17:9)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza
(dir.-kand.med.nauk T.P.Mochalova, zamestitel'direktora po nauchnoy
chasti prof.D.D.Aseyev) Ministerstva zdravookhraneniya RSFSR i
Respublikanskogo protivotuberleznogo dispansera Mariyskoy ASSR
(glavnnyy vrach T.V.Korde).

PLOTNIKOVA, N.G.

Enzyme activity of the pancreas in cholecystitis in children.
Sov. med. 27 no.11:89-92 N '63 (MIA 18st)

1. I. Iz kafedry detskih bolezney (zav. - dozent K.V. Shalupenka) Krymskogo meditsinskogo instituta.

PLOTNIKOVA, M.G., assistent

Accuracy of measuring short lines with invar wires. Trudy MIIGAIK
no.50:65-69 '62. (MIRA 16:7)

1. Kafedra vysshey geodezii Moskovskogo instituta inzhenerov
geodezii, aerofotos"zemki i kartografii.
(Chains—Testing)

PLOTNIKOVA, M.I.; UMANETS, V.N.; KARDOPOL'TSEVA, O.I.

Methods for mapping of high terraces in the middle Markha Basin.
Inform.sbor. VSEGEI no.52:61-68 '62. (MIRA 15:11)
(Markha Valley--Terraces (Geology)--Maps)

PLOTNIKOVA, M.I.

Significance of the lithological method for the stratigraphic division of terrace alluvial sediments in the glacial and extra-glacial regions. Mat. VSEGOI Chet. geol. i geomorf. no. 4: 2'000 288 '61

IL'INSKIY, G.A.; PLOTNIKOVA, M.I.; RAZUMIKHIN, N.V.; RYUMIN, A.K.; SARSADSKIKH, N.N.; SVARICHEVSKAYA, Z.A., doktor geogr. nauk; IL'INA, M.Ye., red.; VODOLAGINA, S.D., tekhn. red.

[Fundamentals of placer deposit surveying] Osnovy poiskov rossyapei; uchebnoe posobie. Leningrad, Izd-vo Leningr. univ., 1961. 122 p.

(MIRA 14:8)

1. Sotrudniki Leningradskogo gosudarstvennogo universiteta im. A.A. Zhdanova (for Il'inskiy, Razumikhin, Ryumin, Svarichevskaia).
2. Sotрудники Vsesoyuznogo geologicheskogo instituta (for Sarsadskikh, Plotnikova)

(Ore deposits) (Geological survey)

PLOTNIKOVA, M.I.; KARDOPOL'TSEVA, O.I.; SALTYKOV, O.G.; UMANETS, V.N.

Paleogeography of the Markha and Tyung interfluve in the Cenozoic
as related to the history of the formation of diamond placers
(Eastern Siberia). Trudy VSEGEI 90:81-96 '63. (MIRA 17:5)

Geological Survey of India
Bengaluru 560 001, India
posting address: Department of Geology, Central University of
Jaffna, Jaffna, Sri Lanka
TAFAN AN SSBR Ser. geol. no.9:123-141 '63. (MIRTA 16:12)

PLOTNIKOVA, M.I.

Recent tectonic movements in the upper part of the Lower Tunguska
Valley. Inform.sbor. VSEGEI no.52:103-111 '62. (MIRA 15:11)
(Lower Tunguska Valley--Geology, Structural)

PLOTNIKOVA, M.I.

Discovery of the ancient weathering surface in the upper course of
the Lower Tunguska River. Mat.VSEGEI Ob.ser. no.23:138-143 '59.
(MIRA 14:11)
(Lower Tunguska Valley--Weathering)

PLOTNIKOVA, M.I.

Relation of the meandering tendency of the Lower Tunguska Valley
to tectonic fracturing. Mat. VSEGEI no.7:237-242 '55. (MLRA 10:4)
(Lower Tunguska Valley--Geology, Structural)

PLOTNIKOVA, N. N., Cand of Med Sci -- (diss) "Pollution of the air by acrolein and its hygienic appraisal." Moscow, 1957, 13 pp (Central Institute for the Advanced Training of Physicians), 200 copies (KL, 37-57, 104)

ПРИБОРЫ И МЕТОДЫ ИССЛЕДОВАНИЯ

Establishment of the permissible limit of acrolein concentration
in the atmosphere. Pred. dop. kontsent. atmosf. zagr. no. 4:75-
91 '60. (MIRA 13:10)

1. Iz kafedry kommunal'noy gigiyeny TSentral'nogo instituta
usovershenstvovaniya vrachey.
(ACROLEIN--PHYSIOLOGICAL EFFECT) (AIR--POLLUTION)

Plotrikova, M. M.
EXCERPTA MEDICA Sec.17 Vol.4/4 Public Health,etc.Apr 58

1386. DATA ON HYGIENIC EVALUATION OF ACROLEIN AS A POLLUTION
OF THE ATMOSPHERE (RUSSIAN text) - Plotrikova M. M. - GIGIENA 12
1957. N (10-10) Osnovnoe i Prilozhenie

A specific and highly sensitive pyrograph method for detection of acrolein has been developed. The threshold for this species of acrolein is 0.01 ppm /m³. The threshold for acrolein in the air calculated on the optical principle is 1.0 mg/m³. On the absorption of acrolein by the blood, a positive change can be observed in the erythrocytes after 10 minutes. The author believes that the method can be used for the detection of acrolein in the air and for the estimation of its influence on the human body.

Med. Institute of Hygiene

Cent Inst. Advanced Training of Physicians

PLOTNIKOVA, M.N.

Effect of levomycetin, vitamin B₆ and vitamin PP on dysenterial
infection in an experiment. Antibiotiki 7 no.1:56-58 Ja '62.
(MIRA 15:2)

1. Kafedra mikrobiologii (zav. - prof. S.I.Sherishorina) Saratovskogo
meditsinskogo instituta.
(DYSENTERY) (LEVOMYCETIN) (PYRIDOXINE)
(VITAMINS--PP)

PLOTNIKOVA, M.N.

Change in the activity of some oxidation-reduction enzymes in Flexner's dysenterial bacteria during the process of adaptation to levomycetin.

1. Saratovskiy meditsinskiy institut, kafedra mikrobiologii (zav. -
prof. S.I.Sherishorina), (LEVOMYGETIN) (ENZYMES) (SHIGELLA)

L 21009-66 IWP(m)/IWP(t) - DMAP/TJP(c) JD
AND IWT ATGII P107 BUDGET CODE: 1W/0306/66/003/008/0303/0306

AUTORES: V. V. Slobodchikov, N. N. Shpinel', V. N.

SOVETSKIE NEFTEKHIMICHESKIE INSTITUTY IZUCHENIA VLIYANIJA MAGNETICHESKOGO ZHELEZA NA VSEGO VSEGO VLIYANIYE (DANNOE TAK SVYAZAT' S TOTIEM VLIYANIYAMI VSEGO VSEGO VLIYANIYA)

TITLE: Barium stannate - a source for the measurement of the Mossbauer effect on Sn¹¹⁹

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniya, v. 3, no. 8, 1966, 323-326

TOPIC TAGS: barium compound, tin compound, Mossbauer effect, Mossbauer spectrum, Gamma interaction, line width

ABSTRACT: The investigation was prompted by the desire to obtain for Mossbauer-effect research a source of recoilless γ quanta that would combine the advantages of the presently used SnO_2 or Mg_2Sn and be free of their shortcomings. The authors have repeated for this purpose earlier investigation of the stannates of barium, strontium, and calcium, whose highly symmetrical crystal lattices cause the influence of the quadrupole interaction on the width of their spectral lines to be small (Shpinel' et al., ZhETF v. 44, 1889, 1963). In the earlier study,

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L 21805-66
ACC NR: AP6012187

however, no account was taken of the doublet character of the tin-oxide spectrum of the SnO_2 source used there. The use of an Mg_2Sn source in conjunction with a resonance counter developed by some of the authors (PTE, no. 4, 55, 1965) has made it possible to determine with great accuracy the form of the spectra of BaSnO_3 , SrSnO_3 , and CaSnO_3 . Since the use of a resonance counter reduces the width of the observed spectrum, the effective width of the source emission line was approximately 0.18 mm/sec. The measurements have shown that the widths of the absorption spectra of the stannates are lower than those reported earlier, and in BaSnO_3 there was observed a single line of nearly natural width. Thus, barium stannate combines the favorable properties of the magnesium stannide and tin oxide emitters. Tests were then made of a BaSnO_3 source prepared in accordance with the usual ceramic technology. Comparison of this source with an Mg_2Sn source, whose transmission spectrum was 0.36 mm/sec wide, has shown that the BaSnO_3 source has at room temperature (293K) approximately the same probability of excitation of resonance γ -quanta and the same emission line width as the BaSnO_3 source at liquid nitrogen temperature. The measurements with the BaSnO_3 source were carried out with a plan unipolar magnetic field in the same geometry. Since the probability of excitation of γ -quanta is higher at the same energy for resonance γ -quanta than for nonresonant γ -quanta, the probability of excitation of resonance γ -quanta is higher at the same energy for the BaSnO_3 source than for the Mg_2Sn source.

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L 21805-66

ACC NR: AP6012187

resonance procedure makes it possible to reduce the width of the observed line by ~ 0.15 mm/sec. It is therefore concluded that an absorber based on barium stannate has simultaneously a large probability of the effect and a near-natural spectrum width. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 25Feb66/ ORIG REF: 005

PB
Card 3/3

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4

TOEKA - DIAZEPHEMISATION, LIQUID CHROMATOGRAPHY, HIGH PRESSURE LIQUID

CHROMATOGRAPHIC ANALYSIS OF AN OXYGEN-CARRYING POLYMER. (CONT'D) (1)
EXTRACTED FROM THE DOCUMENTATION OF THE RADIATION RESEARCH INSTITUTE
(BRIK-TRIAD)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4"

L 7820-66 EWT(1)/EPA(s)-2/EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) DIAAP/IJP(c)
ACC NR: AP5028113 JD/CG SOURCE CODE: UR/0048/65/029/011/2029/2033

AUTHOR: Mitrofanov, K.P.; Viskov, A.S.; Plotnikova, M.V.; Venevtsev, Yu.N.; Shpine1^{*, V.S.}

ORG: none

TITLE: Resonance absorption of gamma rays and internal fields in bismuth ferrite -
strontium stanno-manganite system ferroelectric-antiferromagnetic solid solutions
Report, Fourth All-Union Conference on Ferro-electricity held at Rostov-on-the Don
12-16 September 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2020-2039

TOPIC: ~~Investigation of the magnetic properties of the strontium bismuth ferrite system in the presence of the Sn¹¹³ and Fe⁵⁷ isotopes~~

ABSTRACT: The magnetic properties of the strontium bismuth ferrite system in the presence of the Sn¹¹³ and Fe⁵⁷ isotopes were investigated with the aid of the Mossbauer effect. The powdered solid solutions enriched in Sn¹¹³ and Fe⁵⁷, were prepared from polycrystalline materials by the usual double air-heating ceramic technique. It was verified by x-ray studies that the investigated materials were single phase solid solutions in equilibrium. These solid solutions exhibit ferroelectric and antiferromagnetic properties; the ferroelectric Curie point and the Neel point decrease with increasing manganite content and are below room temperature when the manganite con-

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ACC NR: AP5028113

centration is greater than 37 and 55 mole %, respectively. The resonance absorption of Fe^{57m} and Sn^{119m} γ rays by solid solutions containing 100, 90, 70, and 50 mole percent BiFeO_3 was investigated at temperatures from 77 to 850°K; the experimental technique has been described elsewhere by K.P.Mitrofanov, I.V.Illarionova, and V.S.Shpinel' (Pribory i tekhnika eksperimenta, No. 3, 49 (1963); No. 3, 60 (1956)). Below the Neel point the iron absorption line was clearly resolved into six components, which are ascribed to Zeeman splitting. Above the Neel point the iron absorption line was a doublet with a separation of 0.4 mm/sec; this splitting is ascribed to quadrupole interaction. The tin absorption was broad and could not be resolved into separate components. This broadening is ascribed to superposition of many Zeeman patterns with different splitting, and effective magnetic fields were derived from the absorption contours. The magnetic field at the iron nuclei decreased with increasing temperature and vanished at the Neel point, which was found to be $650 \pm 3^\circ\text{K}$ for pure BiFeO_3 ; the magnetic field extrapolated to 0°K was close to 500 kOe and decreased only slightly in the presence of manganite. The effective magnetic field at the tin nuclei, extrapolated to 0°K, increased with increasing BiFeO_3 concentration; it was about 300 kOe for large BiFeO_3 concentrations and extrapolated to zero at a BiFeO_3 concentration of 27 mole %. The significance of the results is discussed briefly. It is known that the field at the iron nucleus is due mainly to the influence of the electron shell of the iron ion, and it is said to be obvious that the effective magnetic field at the tin nucleus is proportional to the magnitude of the indirect exchange interaction due to polarization of the electron shell of the diamagnetic ion. The tin absorption line

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ACC NR: AP5028113

was not displaced with respect to the SnO_2 source; this shows that the Sn-O bonds in the solutions are highly (65-70%) ionic. Special measurements at 540°K on samples containing 40 and 70 mole % BiFeO_3 showed that the isomeric shift and degree of ionization of the tin remained unchanged on transition from the paraelectric to the ferroelectric state. This result casts doubt on the hypothesis of H.D.Megaw (Acta Crystallogr., 5, 739 (1952); 7, 187 (1954)) that the bond character changes at a ferroelectric transition. It is concluded that the Mössbauer effect provides a useful tool for the investigation of internal fields and bond characters in ferroelectric and ferromagnetic materials. Orig. art. has: 3 figures.

SUB CODE: SS,EM,NP SUBM DATE: "00/ ORIG. REF: 008 OTH REF: 004

Card 3/3

ALEKSANDROV, A.Yu.; DORFMAN, Ya.G.; LEPENDINA, O.L.; MITROFANOV, K.P.;
PLOTNIKOVA, M.V.; POLAK, L.S.; TEMKIN, A.Ya.; SHPINEL', V.S.

Resonance absorption spectra of γ -quanta and the magnetic
susceptibility of solutions of some organotin compounds.
Zhur. fiz. khim. 38 no.9:2190-2197 S '64. (MIRA 17:12)

1. Institut neftekhimicheskogo sinteza AN SSSR i Institut yadernoy
fiziki Moskovskogo gosudarstvennogo universiteta.

L 2768-66 EWT(m)/T IJP(c)

ACCESSION NR: AP5021330

UR/0120/65/000/004/0055/0058
539.1.074.2

28
24
B

AUTHOR: Mitrofanov, K. P.; Plotnikova, M. V.; Rokhlov, N. I.

TITLE: An Mg sub 2 Sn counter for 23.8 keV gamma rays of Sn super 119

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 55-58

TOPIC TAGS: magnesium compound, gamma detector, resonance absorption, gamma counter, gamma spectrum

ABSTRACT: A resonance counter operating in the Geiger region was constructed for recording 23.8 keV nonrecoil γ -rays of Sn119. A high instrumental resolution is achieved by using as the internal coating of the counter the compound Mg₂Sn, the absorption spectrum of which is in the form of a single line of intrinsic width. The procedure employed in the preparation and deposition of Mg₂Sn is described. The counting rate was measured as a function of the displacement rate of the moving counter, and the attenuation of the beam of γ -quanta passing through the moving absorber (Mg₂Sn) was determined. It is found that the resonance method of recording is preferable to the ordinary method, and that the Mg₂Sn counter permits a higher resolution than ordinary methods. The

MITROFANOV, K.P.; PLOTNIKOVA, M.V.; SHPINEL', V.S.

Shape of resonance absorption spectra of 23.8 kev. gamma rays
from the isomer Sn^{119m} in tin oxide and metallic white tin.
Zhur. eksp. i teor. fiz. 48 no. 3:791-795 Mr '65.

(MIRA - PVA)

U.S. EDITION OF THE FOREIGN COLD WAR INTELLIGENCE DOCUMENTS PROJECT, A COMMITTEE OF THE AMERICAN LIBRARIES ASSOCIATION

L 47375-65 EWT(m) Peb DIAAP
ACCESSION NR: AP5008733

S/0056/65/048/003/0791/0795

AUTHORS: Mitrofanov, K. P.; Plotnikova, M. V.; Shpinel', V. S. 23
B

TITLE: Shape of the resonance absorption spectra of 23.8 keV gamma rays from Sn-119m in tin oxide and in metallic white tin 21
14

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 3, 1965, 791-795

TOPIC TAGS: tin oxide, absorption spectrum, resonance absorption, metallic tin, gamma ray spectrum, spectrum shape

ABSTRACT: The shape of the resonance absorption spectrum of 23.8-keV gamma rays of Sn^{119m} in tin oxide and in metallic white tin was studied using the SnO_2 - Sn mixture. The absorption spectra of the two media were compared.

L 47375-65

ACCESSION NR: AP5008733

width, the behavior of the spectrum of metallic tin can be attributed to a change in the splitting from 0.32 to 0.25 mm/sec when the temperature is raised from that of liquid nitrogen to room temperature. "The authors thank T. Gendler, a student of the Physics Department of the Moscow State University, for considerable help with the experiment." Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics, Moscow State University)

SUBMITTED: 08Jul64

ENCL: 00

SUB CODE: NP

NR REF Sov: 008

OTHER: 000

Card 3/3 CC

L 15328-66 EWT(d)/EWT(m)/EWP(v)/EWP(k)/EWP(h)/EWP(l)/ETC(m)-6 DIAAP
ACC NR: AP6001001

SOURCE CODE: UR/0286/65/000/022/0067/0067

AUTHORS: Nefedov, K. P., Vinokur, A. S., Venyavsky, Yu. N., Shulman, V. B.,
Plutnikova, M. V.

UNIT: USSR

FIELD: Physical and mathematical sciences, Physics, General Physics

TOPIC: Radiation effects, Nuclear fission products, Radiation protection

ABSTRACT: This Author Certificate presents a method for measuring temperature, based on the discontinuous change of the effect of resonance gamma-ray absorption with a phase transition in the absorber. To increase the accuracy of measurements, a series of absorbers with different phase transition temperatures is placed in direct thermal contact with the investigated sample. The absorbers are exposed to radiation from a resonance source of gamma-rays and the absorption effect is recorded with detectors.

SUB CODE: 20/

SUBM DATE: 14Apr64

SB
Card 1/1

UBC: 536.51 615.84

MITROFANOV, K.P.; VISKOV, A.S.; DRIKER, G.Ya.; PLOTNIKOVA, M.V.; FAM ZUI KHIYEN;
VENEVTSEV, Yu.N.; SHPINEL', V.S.

Changes in the resonance absorption spectra of 23.8 Kev.
gamma rays from Sn¹¹⁹ during phase transitions in the system
BiFeO₃—Sr(Sn_{1/3}Mn_{2/3})O₃. Zhur. eksper. i teor. fiz. 46
no.1:383-386 Ja'64. (MIRA 17:2)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo
universiteta i Fiziko-khimicheskiy institut imeni Karpova.

ACCESSION NR: AP4012566

S/0056/64/046/001/0383/0386

AUTHORS: Mitrofanov, K. P.; Viskov, A. S.; Driker, G. Ya.; Plotnikova, M. V.; Fam, Zui Khiyen; Venevtsev, Yu. N.; Shpinel', V. S.

TITLE: Change in resonance absorption spectra of 23.8 keV gamma rays of Sn-119 during phase transitions in the system BiFeO₃-Sr(Sn_{1/3}Mn_{2/3})O₃

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 383-386

TOPIC TAGS: resonance absorption, Mossbauer effect, recoilless resonance absorption, ferroelectric antiferromagnetic compound, ferroelectricity, ferro antiferromagnetism, group II stannate, resonance absorption maximum, resonance absorption jump, Mossbauer effect jump, magnetic hyperfine splitting

ABSTRACT: This is a continuation of an earlier investigation by some of the authors (ZhETF v. 44, 2182, 1963) and is aimed at im-

Card 1/2

ACCESSION NR: AP4012566

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Nuclear Physics Institute, Moscow State University); Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 27Sep63; DATE ACO: 26Feb64 ENCL - 02

Card 2/2

MICROFANOV, K.P.; VLSKOV, A.S.; PLOTNIKOVA, M.V.; VENEVTSOV, YU.N.;
SHPINEL', V.S.

Resonance absorption of gamma quanta, and the internal fields
of ferrimagnetic solid solutions in the system
 $\text{BiFeO}_3 - \text{Sr}(\text{Sn}_{1/2} \text{Mn}_{2/3})\text{O}_3$. Izv. AN SSSR. Ser. fiz. 29
no. 11; 2029-2030 N 165. (MERA 18:11)

ENT(1)/ENT(m)/ENT(e) IJP(c) WH
ACC NR: AP6023922

SOURCE CODE: UR/0363/66/002/007/1277/1279

AUTHOR: Gendler, T. S.; Mitrofanov, K. P.; Plotnikova, M. V.; Tykachinskiy, I. D.; 37
Fedorovskiy, Ya. A. B

ORG: Scientific Research Institute of Nuclear Physics (Nauchno-issledovatel'skiy
institut yadernoy fiziki); State Scientific Research Institute of Glass (Gosudar-
stvennyy nauchno-issledovatel'skiy institut stekla)

TITLE: Study of the initial stages of glass crystallization by means of the Mössbauer
effect

SOURCE: AN SSSR. Izv. Neorg materialy, v. 2, no. 7, 1966, 1277-1279

TOPIC TAGS: Mossbauer spectrum, glass, catalyzed crystallization, tin compound

ABSTRACT: By combining data on gamma resonance with x-ray structural analysis, which provides information on the long-range order, new information can be obtained on the early stages of crystallization in pyroceramics. The object of the study were samples of lithium aluminum silicate glass close in composition to spodumene. The catalyst used was SnO_2 (5 wt. %) because the resonance absorption of gamma rays by Sn^{119} nuclei could be thus observed. Comparison of the Mössbauer spectra of the initial glass and of glass subjected to heat treatment (1 hr at 750°C) showed that (1) the spectrum of the initial glass is displaced by 0.06 mm/sec to the left relative to the heat-treated glass, whose spectrum coincides with that of crystalline SnO_2 (cassiterite); (2) the

UDC: 54-161.6:548.0:531

Card 1/2

It is shown that the heat treatment of tin-doped glass causes a change in the Mössbauer effect that in the initial glass the broadening of the spectrum is due to the lack of ordering in cassiterite. The large splitting of the spectrum indicates large generation of electric fields acting on the tin nuclei in the vitreous state of the sample. The line broadening in the initial glass is due to the lack of rigorous ordering in the arrangement of the atoms closest to tin. The heat treatment causes ordering around the tin atoms to take place, i. e., cassiterite nucleation centers are formed, and this change in the short-range order is recorded in the change of the Mössbauer effect. This is followed by a growth of cassiterite crystals, which become large enough to serve as centers for the growth of the main crystalline phase (spodumene). Further treatment causes a complete crystallization of the glass. Orig. art. has: 2 figures.

SUB CODE: 11/ SUBM DATE: 11Oct65/ ORIG REF: 006/ OTH REF: 008

Card 2/2 afs

PLOTNIKOVA, M.Ya.

Editing work in the production of 1:25,000 maps by means of
universal apparatus. Geod.i kart. no.7:48-51 Jl '62.
(MIRA 15:8)
(Cartography)

VINARSKIY, Ye.N., inzhener; LINKOV, A.V., inzhener; MAZING, I.V., inzhener;
CHERETYANKO, V.I., inzhener; RYKHNINA, R.I., inzhener; CHUPRINA,
N.A., inzhener. PLOTNIKOVA, M.Z., inzhener; LEYPSOV, A.M., inzhener;
LELYAKOVA, L.P., inzhener; MAMALOVSKAYA, M.V., inzhener; UZUNKUYAN,
I.D., inzhener; SEVRYUKOV, Ye.G., inzhener; VINARSKIY, Ye.N., redaktor;
ALADOVA, Ye.I., tekhnicheskiy redaktor

[Metal demountable headframe] Prokhodcheskie metallicheskie sborno-
razbornye kopry. Moskva, Ugletekhizdat, 1954. 110 p. (MLRA 8:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii
i mekhanizatsii shakhtnogo stroitel'stva.
(Mine buildings)

Plotnikova, N.

PLOTNIKOVA, N.

"Proteins," Vol.1: The chemistry of proteins. Reviewed by
N. Plotnikova. Vop.med.khim. 3 no.4:317-318 Jl-Ag '57.
(PROTEINS) (MIRA 10:11)

KOCHERGIN, V.P.; CHERDANTSEVA, N.N.; PLOTNIKOVA, N.I.

Solution of cold-rolled tin in fused chlorides of tin, zinc, and alkali metals. Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 no.5: 734-740 '59. (MIRA 13:8)

1. Ural'skiy gosudarstvennyy universitet, kafedra neorganicheskoy khimii.
(Tin) (Chlorides)

18 Microstructure of iron-chromium alloys annealed for different time at 1200°. A. G. Lenik and N. P. Plotnikova, Sverdlovsk Nauč. Robot. Lab. Metallofiz., Akad. Nauk Ukr. S.S.R., 1954, No. 5, 125-71; Riferint. Zhr., Met., 1956, 3, 5-10.

S/137/62/000/008/049/065
A006/A101

AUTHORS: Gertsriken, S. D., Plotnikova, N. P.

TITLE: The effect of γ -radiation upon the properties of electrolytic nickel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 102, abstract 81687
("Sb. nauchn. rabot In-ta metallofiz. AN UkrSSR", 1961, no. 12,
88 - 92)

TEXT: Electrolytic-Ni specimens were irradiated with Co^{60} in a $10^{14} - 10^{16}$ $\gamma\text{-quantum}/\text{cm}^2$ dosage. X-ray inspections were performed with annealed specimens in large-size Debye chambers and Sachs chambers in Cu-irradiation. To determine the line width the radiographs were subjected to microphtometrical analysis. On the radiographs of irradiated specimens broadening of the lines was observed which is caused by the crushing of mosaic domains and is not connected with increasing stresses of the II order. The average value of domain sizes for two irradiated specimens (6.2 ± 0.4) $\cdot 10^{-6}$ cm does not depend on the irradiation dosage when it is changed by a factor of 3, namely from $2.3 \cdot 10^{16}$ to $6.8 \cdot 10^{16}$ $\gamma\text{-quantum}/\text{cm}^2$. The broadening of lines is attributed to the presence in the irradiated metal of dis-

APPROVED FOR RELEASE: 08/23/2000

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The effect of γ -radiation upon...

S/137/62/000/008/049/065
A006/A101

location-type failures. The average value of dislocation density is $N = (9.8 \pm 2.4) \cdot 10^{10} \text{ cm}^{-2}$. When the dosage of irradiating electrolytically remelted Ni (99.99%) varies by a factor of 30 ($7.2 \cdot 10^{14} - 2.2 \cdot 10^{16} \gamma\text{-quantum}/\text{cm}^2$), N increases from $4 \cdot 10^{10}$ to $3 \cdot 10^{10} \text{ cm}^{-2}$. The absence of a dependence of N in non-remelted Ni is explained by the fact that with a slight change in the irradiation dosage (by a factor of 3) N irradiation changes within a tolerance limit of determining this value. Measurements of microhardness have shown that during irradiation it is raised by 1 - 2 units, which exceeds by about twice the mean square error in determining the hardness.

A. Rusakov

[Abstracter's note: Complete translation]

L 3/053-66 ENT(m)/T/EWP(t)/ETI IJP(c) JH/JD/JG
ACC NR: AP6017314 (N)

SOURCE CODE: UR/0126/66/021/005/0797/0799

AUTHORS: Borimskaya, S. T.; Larikov, L. N.; Plotnikova, N. P.

59

B

ORG: Institute of Metal Physics, AN UkrSSR (Institut metallofiziki AN UkrSSR)

TITLE: Investigation of the strengthening effect due to annealing in neutron irradiated single crystals of Al, Cu, and Mo

ABSTRACT: The effect of neutron irradiation on the mechanical properties of neutron irradiated single crystals of Al, Cu, and Mo was studied. The strength of the single crystals was assessed by means of microhardness measurements. The structural changes occurring during annealing were studied by x-ray techniques. The experimental procedure followed is described by V. M. Danilenko and G. Ya. Kozyrskiy (Sb. Voprosy fiziki metallov i metallovedeniya, No. 11, Kiev, Izd. AN UkrSSR, 1960, str. 150), and V. P. Vertebnyy, M. F. Vlasov, V. V. Kolotyy, A. N. Maystrenko, and M. V. Pasechnik (Atomnaya energiya, 1962, 12, 4, 324). The experimental results are presented graphically (see Fig. 1), showing that none of the irradiated single crystals investigated undergoes recrystallization. It is concluded that the strengthening effect of neutron irradiation on the single crystals of Al, Cu, and Mo is not due to a recrystallization process.

Card 1/2

UDC: 548.0:539

L 37653-66

ACC NR: AP6017314

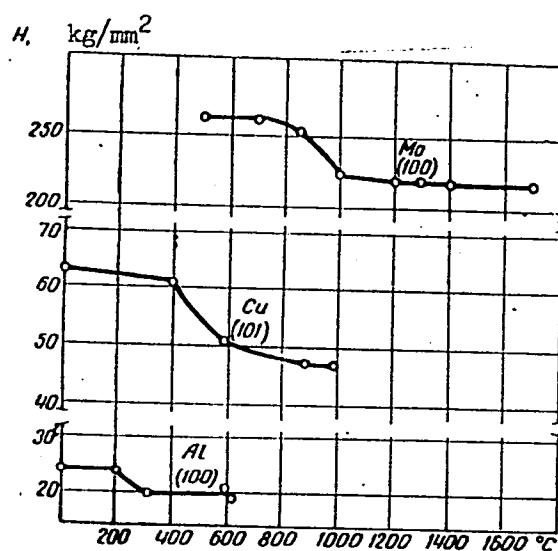


Fig. 1. Change in the microhardness of irradiated single crystals of Al, Cu, and Mo as a function of the annealing temperature.

OPTICAL MICROSCOPE 1150X 1150X 1150X 1150X 1150X 1150X 1150X 1150X

1150X 1150X 1150X 1150X 1150X 1150X 1150X 1150X

ACCESSION NR: AT4010692

Structure - electrolytic copper and nickel, Ammonium chromite, molybdenum and molybdenum - following exposure to neutrons to a VVR fraction at a maximum neutron density of 10^{19}n/cm^2 sec. The hardnesses of unirradiated and irradiated samples were measured with a type DZ-BU-100 apparatus specially adapted for use in a vacuum chamber. The results showed that the values of the basic hardnesses in copper and nickel, i.e., in metals with tightly packed body-centered lattices, the hardnesses increased considerably (a metal with a relatively low melting point); that of niobium (high melting point) showed hardly any change. In all cases -- with the exception of niobium--the increase in hardness appeared only after a total dose of 10^{19}n/cm^2 . The effect of exposure to neutrons on the thermoelectro-method. A dose of 10^{17}n/cm^2 yielded a thermoelectromotive force of 10^{-8} v/degree. Comparison of this value with the values obtained following maximal torsion or rolling deformation (10^{-7} v/degree) showed that the effect of neutron irradiation was lower by one order of magnitude. Judging by the results obtained, it may be assumed that the thermoelectromotive force increases with an increase in dose. It should be noted that the effect on the thermoelectromotive force appeared at lower total doses of exposure than the effect on hardness. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Instytut metalofizyky AN UkrRSR (Metallophysics Institute, AN
Card 2/3

PLOTNIKOVA, N. P.

90

SOV/6176

PHASE I BOOK EXPLOITATION

Konobeyevskiy, S. T., Corresponding Member, Academy of Sciences
USSR, Resp. Ed.

Deystviye vadernykh izlucheniy na materialy (The Effect of
Nuclear Radiation on Materials). Moscow, Izd-vo AN SSSR,
1962. 383 p. Errata slip inserted. 4000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk;
Otdeleniye fiziko-matematicheskikh nauk.

Resp. Ed.: S. T. Konobeyevskiy; Deputy Resp. Ed.: S. A.
Adasinsky; Editorial Board: P. L. Gruzin, G. V. Kurdyumov,
B. M. Levitskiy, V. S. Lyashenko (Deceased), Yu. A. Martynyuk,
Yu. I. Pokrovskiy, and N. F. Pravdyuk; Ed. of Publishing
House: M. G. Makarenko; Tech. Eds: T. V. Polyakova and
I. N. Dorokhina.

(R&D 1/14)

The Effect of Nuclear Radiation (Cont.)

SOV/6176

Dekhtyar, I. Ya., V. I. Ust'yanov, and M. M. Ustinov.
Effect of Nuclear Radiation on the Structure and Properties
of Ferromagnetic Metals and Alloys. I. The Effect of Nuclear
Radiation on the Properties of the Lanthanide-³Fe₂O₄ Spinel Alloys.

Effect of Nuclear Radiation on the Properties of the Lanthanide-³Fe₂O₄ Spinel Alloys
Radiation Disturbances in Metals

Dekhtyar, I. Ya., and A. M. Shalayev. Change in Physical
Properties of Ferromagnetic Metals and Alloys Caused by
 γ -Radiation

Gartarken, S. D. (Deceased), and N. P. Plotnikova. Effect
of γ -Irradiation on Processes of Ordering and Disordering in
Fe-Al Alloys

Konozenko, I. D., V. I. Ust'yanov, and A. P. Galushka.
 γ -Conductivity of Cadmium Selenide

Card 11/14

PLOTNIKOV, N.P.

30V/2306

PHASE I BOOK EXTRICATION

Institut metallofiziki
Institute of Physics
Metallovedeniya (Problems in the Physics
of Metallurgy and Metallography) Kiev, Ukrainskii SSR.
Editor: V. L. Shukurov. 3,000 copies printed.

Meeting house: V.L. Shukurov; Tech. Ed.: M.I. Verikov
Second: V.M. Srechenski; Academician, Academy of Sciences
USSR (Rep. Ed.): S.D. Gertserkin, Doctor of Physical
and Mathematical Sciences; and I.M. Demyan, Doctor of Physical
and Mathematical Sciences.

This collection of articles is intended for scientific men, engineers, and workers in the fields of the physics of materials, metallurgy, and metallurgy. It may also be useful in the field of metallography, and metallurgy.

A collection of articles deals with the following: Effect of high-speed heating, heat treatment, deformation, crystallization conditions on phase transformation, and properties of metals and alloys; effect of alloying components on volumetric and interparticle damping in alloys; and the effect of repeated quenching and tempering on mechanical properties. No personalities are mentioned. References

J.-D. Gertner, A.M. Shultz, and
Effect of Striction on Some Physical
Properties of Ni-Mn Alloy
The influence of γ -irradiation
on the galvanic effect; on the lattice
parameters of the Ni-Mn Alloy (electrolytic Ni) and on the Process of
Electrolytic Mn;

178

Effect of Alloying

and T.Ya. Benyaga. Effect of Alloying on the Plastic Properties of Nickel.

The results of experimental investigation of the influence of alloying elements on the modulus of elasticity on the composition of Ni-Cr and Ni-Ti alloys are presented. The effect of heat treatment on elastic properties of these alloys is discussed.

—, and Ye.I. Sonina. Influence of Composition on the Plastic Structure of

—. Previous work done previously on investigation of the plastic structure of cast aluminum (Al) crystals. The investigation takes into account the process of grain growth and eventual destruction.

198

N. N. Dariikov. Calculation of the Intensity of X-rays of a Disperse System of Atoms in a Fluid by the Xeroradiometric Method

The function of distribution of atoms is calculated. The intensity curve of dispersed X-rays of a system is used as an example.

10-12-59
1000/AF

CONTINUITY OF CONVERSATION

DEKHTYAR, I.Ya.; GERTSRIKEN, S.D.; SHALAYEV, A.M.; PLOTNIKOVA, N.P.

Effect of γ -irradiation on certain physical properties of
 Ni_3Mn . Sbor. nauch. rab. Inst. metallofiz. AN URSR no.9:173-177
'59. (MIRA 12:9)
(Gamma rays) (Nickel-manganese alloys--Metallography)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4"

SOV/137-57-6-107

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 195 (USSR)

AUTHORS: Plotnikova, N.P., Lesnik, A.G.

TITLE: The Influence of Long-term High-temperature Annealing on the Kinetics of the Polymorphic $\gamma \rightarrow \alpha$ Transformation in Ferrochrome Alloys (Vliyaniye dlitel'nogo vysokotemperaturnogo otzhiga na kinetiku polimorfного $\gamma \rightarrow \alpha$ -prevrashcheniya v zhelezokhromistykh splavakh)

PERIODICAL: Sb. nauch. rabot In-ta metallofiz. AN UkrSSR, 1956, Nr 7, pp 88-94

ABSTRACT: The kinetics of the long-term $\gamma \rightarrow \alpha$ transformation in ferrochrome alloys due to the influence of annealing at temperatures of 1100°C and 1200°C is investigated. The results are compared with the data of other authors.

The Influence of Long-term High-temperature Annealing (cont.)

SOV/137-57-6-10779

may be employed to determine E. It is found that long PA increases the time required for complete T and E. The value of E and its increase are the larger, the greater the amount of Cr in the alloy. Change in E is analogous to change in the energy of activation of Cr diffusion and is explained by hardening of the lattice in connection with the appearance of the short-range order due to long PA. E does not correspond to the energy of activation of Cr diffusion, as $\gamma \rightarrow \alpha$ T is not diffusive.

L.V.

Card 2/2

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4

100-001341320012-4

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341320012-4"

I 10796-66 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(h)/EWA(c) IJP(c) JD/GG/GS
ACC NR: AT5023811 SOURCE CODE: UR/0000/62/000/000/0306/0307

AUTHOR: Gertsbriken, S. D. (Deceased); Plotnikova, N. P.

ORG: none

TITLE: Effect of gamma-ray irradiation on the ordering and disordering processes in Fe-Al alloys

SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniya na materialy.
Moscow, 1960. Deystviye yadernykh izlucheniya na materialy (The effect of nuclear
radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962,
306-307

TOPIC: Effect of gamma-ray irradiation on the ordering and disordering processes in Fe-Al alloys

ABSTRACT: The effect of gamma-ray irradiation on the lattice constants of the
alloys was studied. The results obtained show that the lattice constant of the Fe-Al alloy with 35 at% Al
in the disordered state, Fe-Al alloy with 35 at% Al in the partially ordered state, and the same alloy partially ordered by annealing at 2000-3000 for 100 hours were
irradiated with gamma-rays at 500. It was found that gamma irradiation from Co-60
isotope increases the lattice constants of the alloy. The lattice constant of the
Fe-Al alloy with 35 at% Al exposed to doses of 1.8×10^6 , 3.5×10^6 , and 6.5 to
 17×10^6 roentgen increased from 2.882 KX to 2.8863, 3.8865, and 2.8866 KX, respectively.
The increase of the lattice constant meter in this alloy was also observed

Card 1/2

L 10796-66

ACC NR: AT5023811

in the disordering of the alloy lattice produced by deformation. The gamma-ray irradiation of the partially ordered lattice of the alloy with 25% at% Al and of the same alloy in the annealed state produces an insignificant decrease in the lattice constant. The irradiation of unordered or partially ordered alloys was found to contribute to ordering. Irradiation with gamma-rays with 10^6 roentgen had no effect on the lattice constant of the alloy. It appears that relatively low integrated fluxes of gamma-rays (10^{16} per cm^2) have an effect on the ordering and disordering processes in Fe-Al alloys. Orig. art. has: 1 table. [ND]

SUB CODE: 13, 20 SUBM DATE: 18Aug 62/ ORIG REF: 001/ OTH REF: 005

PC

Card 2/2

БЕЛЛОВА, В.А.; ПЛАТИНОВА, О.В.; ВЫКОВ, Н.Н.; СОКОЛОВА, Е.В.; АВИМОВ, Г.Г.;
БАРСЕНМАН, Kh.А.; БОДИНА, Р.Н.; ГУШЕВА, Л.Л.; КАМЕНСКИЙ, В.Г., red.;
БЫКОВ, А.Н., tekhn.red.

[Economy of Tambov Province; a statistical manual] Narodnoe khozai-
stvo Tambovskoi oblasti; statisticheskii sbornik. [Tambov] Izd-vo
"Tambovskaya pravda," 1957. 187 p. (MIRA 11:3)

1. Tambovskaya oblast'. Statisticheskoye upravleniye. 2. Statisti-
cheskoye upravleniye Tambovskoy oblasti (for all except Kamenskiy,
Bykov). 3. Nachal'nik Statisticheskogo upravleniya (for Kamenskiy)
(Tambov Province--Statistics)

LA

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The separation of crystalline proteins from the skin of mammals, birds, reptiles, amphibians, and fish. N. K. Plotnikova. Doklady Akad. Nauk S.S.R. 59, 1715-18 (1947); Chem. Zentr. (Russian Zone Ed.) 1948, II, 1313-13.

In connection with the work of Ovchinnikov and others (Doklady Akad. Nauk S.S.R. 57, No. 6 (1947); C.A. 47, 1947), and that of Iustimovich (I.J. I., 1947), a study was made of the separation of crystalline proteins from the skin of various animals. The results obtained are summarized below:

1. The method of separation of proteins from the skin of the various animals studied is based on the use of a buffer solution of citric acid at pH 3.0-3.5. A protein solution is obtained by boiling the skin in water for 10-15 minutes. The protein solution is then dialyzed against a buffer solution of citric acid at pH 3.0-3.5. The yield of protein is 1.0-1.5% (based on wt. of dried skin). Total yield 30-40%. Dog: Optimum pH, 3.1. Yield 0.05%. Crystal size 120 μ . Cat: Optimum pH, 3.6. Max. yield 0.05%. Crystal size, 100 μ at a pH of 3.2. Yield 0.05%. Chicken: pH of buffer, 3.0-3.45. Here there was a definite relation between crystal size and the pH of the buffer solution. Dialysis with water yielded crystals of 25 μ at a pH of 3.51 and of 32 μ at a pH of 4.53. Turtle: pH of buffer, 3.00-4.24. Dialysis with water yielded a crystal size of 39-63 μ at a pH of 1.90, while dialysis with NaHPO₄ yielded only very fine crystals. Fish: Buffer pH, 3.47-4.42. Dialysis with water yielded crystals of 36-52 μ ; dialysis with NaHPO₄ yielded crystals of 26-36 μ . Crystal yield 2.5%.

M. G. Moore

OREKHOVICH, V. N., TUSTANOVSKIY, A. A., OREKHOVICH, K. D., PIOTNIKOVA, N. Ye.

Moscow, 1947

Mbr., Lab. Chemistry of Albumins, Inst. Biol. & Med. Chemistry, Acad. Med. Sci. SSSR,
Moscow, 1947

"Procollogen of the Skin," Biokhimiya, 13, No. 1, 1948. BNL Guide, 1:7, 1948

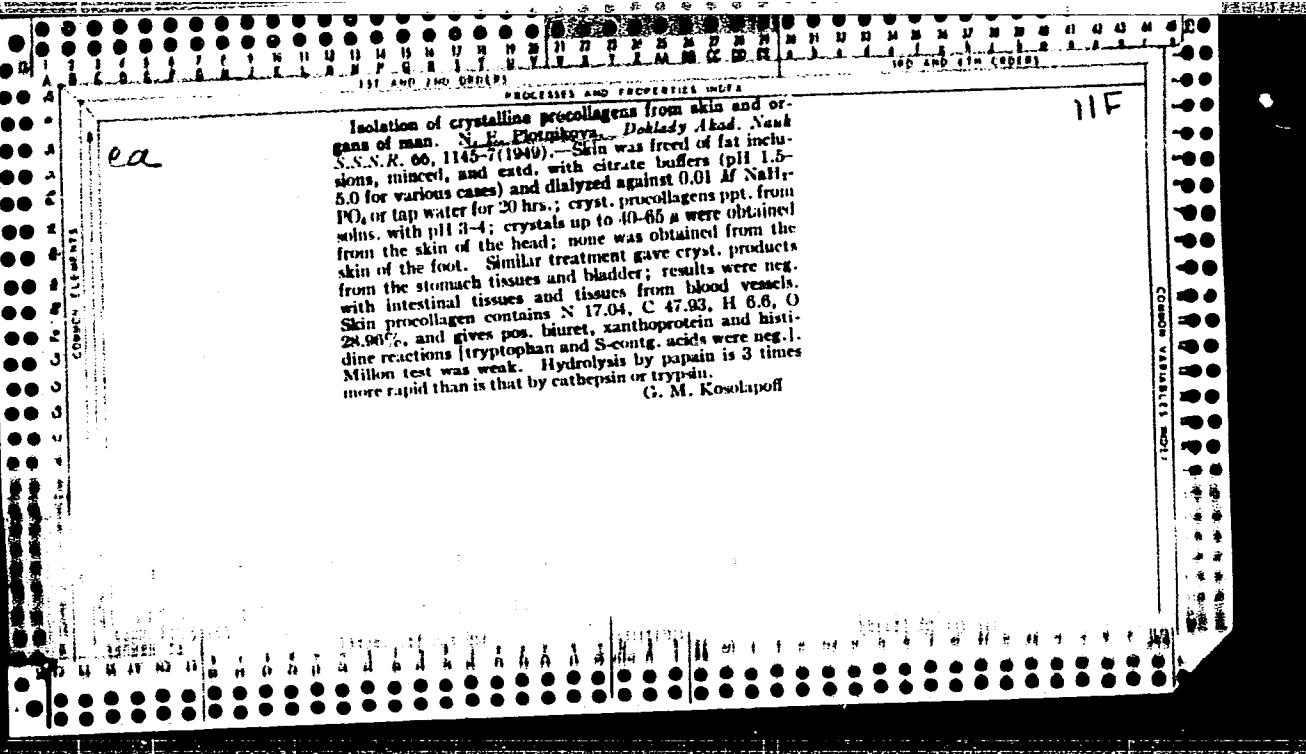
PLOTNIKOVA, N.

Enzymic rupture, sulfhydryl group reactivity, optical activity, and the viscosity of partially denatured egg albumin. K. I. Strachitskij and N. E. Plotnikova (Inst. Med. Chem. and Biol. Acad. Med. U.S.S.R., Moscow), Ukrainsk. Biokhim. Zhur. 20, 187-92 (1948) (in Russian); cf. C.A. 46, 4500b. Cryst. egg albumin, partially denatured by urea and heat, has been sepd. into two fractions, sol. and insol., which were separately investigated relative to enzymic rupture. The sol. fraction has the same resistance to papain as does the original native albumin, and after further heating of this fraction albumin rupture increases considerably. The insol. fraction of partially denatured egg albumin is readily hydrolyzed by papain, does not react upon preliminary heating, and in this respect behaves as a completely denatured protein. Optical activity, viscosity, and -SH group reactivity of the sol. fraction showed no differences from those of native albumin. The above results confirm that denaturation of egg albumin proceeds according to the all-or-none law.

Clayton P. Holloway

OREKHOVICH, V.N.; TUSTANOVSKIY, A.A.; PLOTNIKOVA, N.Ye.

Inspection of a new type of cutting machine presented to me
by Tch



PLOTNIKOVA, N. Ye.

"Occurrence and Properties of Procollagens." Thesis for degree of Cand. Biological Sci. Sub 8 Jun 50, Acad Med Sci USSR

Summary '71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernaya Moskva, Jan-Dec 1950.

[The so-called proteinoids and anticomplexes. V. N. Orekhovich, M. I. Leviant, and N. R. Plotnikova (Inst. Biol. and Med. Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Trudy Vsesoyuz. Obshchestva Fiziologov. Biokhimikov i Farmakologov Akad. Nauk S.S.R.* 2: 169-5(1954).—A few expts. are presented which render valueless the work of S. S. Perov and his concept of the total identity of all proteinoids, as stated in 1838 by Mulder.] B. S. Leviant

PLOTNIKOVA, N.Ye.; MANT'YEV, V.A.

Electrophoretic study of plasminogen. Vop.med.khim. 5 no.5:343-
347 S-O '59. (MIRA 13:2)

1. Institute of Biological and Medical Chemistry, Academy of Medical
Sciences of the U.S.S.R.
(FIBRINOLYSIN)

PLOTNIKOVA, N. Ye., mladshiy nauchnyy sotrudnik; BUVAYLO, S.A., assistent;
OREKHOVICH, V.N., prof.; STRUKOV, A.I., prof.

Changes in the aorta under the influence of glycerin. Trudy
1-go MMI 22:239-248 '63 (MIRA 18:2)

REF ID: A6591

Лаборатория по изучению проблем и методов
вопроса медицинской химии № 4, 381-384 М-48 (6), (БИХА 153-9)

1. Институт биологической и медицинской химии и фармакологии
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(ТРИПСИН)

PLOTNIKOVA, N. Ye., BUVAYLO, S. A., OREKHOVICH, V. N., STRUKOV, A. I., (USSR)

The Specific Action of Glycerol on Blood Vessel Walls.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

PLOTNIKOVA, N. Y., BUVAYLO, S. A., OREKHOVICH, V. N., STRUKOV, A. I., (USSR)

"The Specific Action of Glycerol on Blood Vessel Walls."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

OREKHOVICH, V.N.; PLOTNIKOVA, N.Ye.

Specific activity of glycerin on the blood vessel walls. Vop.
med.khim. 6 no.5:544 S-0 '60. (MIRA 14:1)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR.
(GLYCEROL) (BLOOD VESSELS)

LESNIK, A.G.; PLOTNIKOVA, N.P.

Microstructure of iron-chromium alloys annealed in varying lengths
of time at 1200° temperature. Sbor. nauch. rab. lab. metallofiz.
no.5:123-127 '54. (MIRA 8:9)
(Iron-chromium alloys--heat treatment)

PLOTNIKOVA, O.

USSR/Human and Animal Physiology - Neuro-Muscular Physiology. V-11

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4351

Author : O. Plotnikova

Inst : Leningrad Medical Institute of Sanitation and Hygiene
and Pediatric Orthopedic Institute.

Title : A Dynamometer for the Muscles of the Tarsus-Metatarsus
Joint.

Orig Pub : Tr. Leningr. sam.-gigiyen. med. in-ta i n. i. detsk.
ortoped. in-ta 1956, 29, 154-156

Abstract : No abstract.

L 15683-63

ACCESSION NR: AR3003588

but Te and Pb remain on the resin. Then Te is washed out with 600 ml of 0.5N HCl and Pb with 300 ml of 0.01N HCl. The suggested method permits the quantitative separation of Te also from Au, Ag, Bi, Cu, Hg, Sb, Sn, U, V, Zn, and other elements and it would be anticipated that the separation of Tellurium could similarly be accomplished.

DATE ACQ: 12Jun63

SUB CODE: OH,EL

NR001 00

Card 2/2

PLOTNIKOVA, G.M.; LYSENKO, V.I.; MASHUKOV, A.Ya.

Using anion exchangers without the use of a tower in determining
cadmium, lead, and zinc in ferrous and cuprous materials. Sber.
trud. VNIITSVETMET no.9227-231 '55.

(MIRA 18:11)

PIOTNIKOVÁ, G. V.

Uflyand, Yu. M. and Plotnikova, G. V. "Physiological characteristics of the shin muscles based on data of chronaximetry in congenital toe-in", Sbornik nauch. trudov (M-vo zdravookhraneniya RSFSR. Resp. nauch.-issled. in-t vosstanovleniya trudosposobnosti fiz. defektivnykh detey im. prof. Turnera), Leningrad, 1948, p. 307-27.

SO: U - 3042, 11 March 53, (Letopis "Zhurnal "nykh Statей, No. 7, 1949).

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~~СИДОРЕНКО, О. В.~~

Chronaximetric investigations in sequelae of poliomyelitis. Trudy
1956(1) 29:192-202 '56. (MIRA 10:9)

1. Fiziologicheskaya laboratoriya (zav. - prof. Yu.M.Uflyand)
Instituta im. Turnera.
(POLIOMYELITIS, complications,
see., chronaximetry (Rus))

PLOTNITSKIY, O.V.

Efficient loading conditions for machine tools. Mashinostroitel'
no.11:37,40 N '64 (MIRA 18:2)

PLOTNIKOVA, P.

Interprovince conference on diphtheria in Irkutsk. Vop. okh.mat. i
det. 5 no.1:94 Ja-F '60. (MIRA 13:5)

1. Glavnnyy pediatr Irkutskogo oblastnogo otdela zdravookhraneniya.
(DIPHTHERIA)

L 23284-65 EWT(m)/EWP(w)/EWA(d)/I/EWP(t)/EWP(b)/EWP(1) IJP(c) 3D
ACCESSION NR: AR4040339 S/0124/64/000/004/V073/V074

SOURCE: Ref. zh. Mekhanika, Abs. 4V550

AUTHOR: Bikashev, F.J. Snagulova, A.; Plotnikova, R.

TITLE: The effect of plastic deformation on the structure and microhardness of copper 18 19

CITED SOURCE: Tr. Kazakhsk. politekhn. in-ta, sb. 23, 1963, 247-252

TOPIC TAGS: copper microhardness, copper crystal structural, plastic deformation, compression deformed sample, crystallite block fragmentation, interference line width, interference line intensity, extinction effect, x-ray analysis

TRANSLATION: The study concerned Cu with a grain size varying from 10^{-4} to 10^{-2} cm. Samples were deformed by compression. The authors measured the microhardness and carried out an x-ray structural analysis of the width and intensity of interference lines. It was established that blocks of mosaic structure undergo changes and become disoriented in the process of plastic deformation. As a result, the microhardness increases as the level of deformation advances to 25-30%. Saturation follows in the 40-70% area and a further increase in microhardness occurs a-

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ACCESSION NR: AR4040339

bove deformation levels of 85-95%. The widening of the lines on x-ray patterns increases when the level of deformation is raised to 30%. Such an increase is related primarily to fragmentation of crystallite blocks. Fragmentation moderates as the level of deformation continues to rise and accelerates again when it reaches levels of 85-90%. The width of low index lines does not vary in the process of deformation. The intensity of lines on x-ray patterns decreases as the level of deformation rises. The authors noted the significance of the extinction effect on the magnitudes of line intensity measured on x-ray patterns for various levels of deformation. L. I. Mirkin

SUB CODE: MM, SS

ENCL: 00

Card 2/2

S/032/61/027/009/001/019
B117/B101

AUTHORS: Shcherbov, D. P., and Plotnikova, R. N.

TITLE: Fluorometric determination of submicrogram amounts of beryllium in mineral raw materials

PUBLISHER: Izdatelstvo Naukova Literatury po Fizike, 1964, 100 p.

ABSTRACT: The fluorometric determination of submicrogram amounts of beryllium in mineral raw materials is described. The method is based on the formation of the beryllium citrate complex in the presence of citric acid. A spectrophotometer of the SF-4 type was used for the measurements. The spectra of the excitation and emission of fluorescence were investigated on the SF-4 with suitable attachments (SF-10 (RNU-10) photomultiplier and MCP1-01 (PSR1-01) recorder). A borate-citrate buffer solution with Trilon B contained 1% of Be in 10 ml. Measurements showed that the maxima of absorption and excitation of the beryllium complex lay at 430-440 m μ , and the radiation maximum at 525-530 m μ . For this reason, it is more suitable to use radiant flux of longer wavelength, instead of ultraviolet light, for the excitation of fluorescence. For this purpose, several colored glasses, as well as 10- and 40% aqueous potassium chromate solutions with a layer

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Fluorometric determination of ...

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B117/B101

thickness of 10 mm were used as combined light filters. The brightness of luminescence of solutions with a BeO content from 0.2 to 1.0 g was measured on a simplified fluorometer with incandescent lamp (Ref. 17: D. P. Shcherbov, A. I. Ponomarenko. Byulleten' ONTI MGION SSSR, no. 2 (31) (1961)). Best results were obtained with a secondary light filter from 40% potassium chromate solution and a primary light filter from violet ~~YC~~-1 (FS-1) glass combined with yellow ~~YC~~-4 (ZhS-4) or ~~YC~~-11 (ZhS-11) glasses. When using these filters, between 0.05 and 1.0 g BeO can be determined on a fluorometer with incandescent lamp, in a total volume of 10 ml. A larger amount of morin must be introduced for a higher beryllium content, which, however, reduces the sensitivity because of the "screening" effect of morin. Maximum brightness of the luminescence develops within 5 min, then it decreases slowly. During the first hour it decreases by 5-10%, but remains proportional to the beryllium content. Such a reduction is, therefore, practically of no importance when a calibration scale is used which was prepared simultaneously with the specimen. To clarify the behavior of other elements under equal experimental conditions (solution with Triton N, ascorbic acid and citric acid, and borate buffer with pH = 13), they were tested in amounts of 100 g and 1 mg. In the presence of Triton N, (Hard 9/4)

SHCHERBOV, D. P.; PLOTNIKOVA, R. N.

Determination of beryllium with morin in ores. "Vestn. anal. khim. reak. i prepar.", no. 4, 62-65 '62.

Determination of beryllium with morin in ores. "Vestn. anal. khim. reak. i prepar.", no. 4, 62-65 '62.

Determination of beryllium with morin in ores. "Vestn. anal. khim. reak. i prepar.", no. 4, 62-65 '62.

SHCHERBOV, D.P.; PLOTNIKOVA, R.N.

Fluorometric determination of submicrogram amounts of beryllium
in ores. Zav.lab. 27 no.9:1058-1062 '61. (MIRA 14:9)

1. Kazakhskiy institut mineral'nogo syr'ya.
(Beryllium--Analysis)

PLOTNIKOVA, S.I.

Mbr., Inst. of Exp. Med., Acad. Med., -cl949-.

"Comparative Morphology of the Vegetative Nerve System,

Dok. AN, 68, No. 4, 1949:

Comparative II,
Receptor Cells and Effector Nervous Terminations

Digestive Tract of the Larva of the Dragon Fly Aeschna

Sp." ibid., 62 No. 5, 1949.

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PLOTNIKOVA, S. I.

Stomach

Innervation of the aponeurosis of the transverse muscle in the stomach of the rabbit.
Dokl. AN SSSR 85, No. 3, 1952.

PLOTNIKOVA, S. I.

Muscles

Innervation of the aponeurosis of the transverse muscle in the stomach of the rabbit.
Dokl. AN SSSR 86 No. 3, 1952.

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